Brunner & Lay's PAVING-BREAKER ACCESSORY TOOLS





Standard moil point

Shank Sizes: $\frac{7}{8}$ " x3 $\frac{1}{4}$ ", 1"x4 $\frac{1}{4}$ ", 1 $\frac{1}{8}$ " x6", 1 $\frac{1}{4}$ "x6" (Hex.). Lengths: 14", 18", 24", 30" and up to 144" u. c. Stock Sizes: $\frac{7}{8}$ ", 1", 1 $\frac{1}{8}$ " and 1 $\frac{1}{4}$ " (Hex.).



Hi duty moil point

Shank Sizes: $\frac{7}{8}$ "x3 $\frac{1}{4}$ ", 1"x4 $\frac{1}{4}$ ", $1\frac{7}{8}$ "x6", $1\frac{1}{4}$ "x6" (Hex.). Lengths: 14", 18", 24", 30" and up to 144" u. c. Stock Sizes: $1\frac{7}{8}$ ", $1\frac{1}{4}$ " and $1\frac{3}{8}$ " (Rd.).



Standard narrow chisel bit

Shank Sizes: $\frac{7}{8}$ " x3 $\frac{1}{4}$ ", 1" x4 $\frac{1}{4}$ ", 1 $\frac{1}{8}$ " x6", 1 $\frac{1}{4}$ " x6" (Hex.). Lengths: 14", 18", 24", 30" and up to 144" u. c. Stock Sizes: $\frac{7}{8}$ ", 1", 1 $\frac{1}{8}$ " and 1 $\frac{1}{4}$ " (Hex.).



Hi duty narrow chisel bit

Shank Sizes: $\frac{1}{8}$ "x3 $\frac{1}{4}$ ", 1"x4 $\frac{1}{4}$ ", $1\frac{1}{8}$ "x6", $1\frac{1}{4}$ "x6" (Hex.). Lengths: 14", 18", 24", 30" and up to 144" u. c. Stock Sizes: $1\frac{1}{8}$ ", $1\frac{1}{4}$ " and $1\frac{1}{8}$ " (Rd.).



Standard 3-inch chisel bit

Shank Sizes: $\frac{7}{8}$ "x3 $\frac{1}{4}$ "*, 1"x4 $\frac{1}{4}$ ", $1\frac{1}{8}$ "x6", $1\frac{1}{4}$ "x6" (Hex.). Lengths: 14", 18", 24", 30" and up to 144" u. c. Stock Sizes: $\frac{7}{8}$ ", 1", $1\frac{1}{8}$ " and $1\frac{1}{4}$ " (Hex.). *2 $\frac{1}{2}$ " blade.



Hi duty 3-inch chisel bit

Shank Sizes: 1''x41/4'', 11/8''x6'', 11/4''x6''. Lengths: 14'', 18'', 24'', 30'' and up to 144'' u. c. Stock Sizes: 1'', 11/8'', 11/4'' and 13/8'' (Rd.).



Sabur points

® U. S. Pat. No. 2-557,195, Canadian Pat. No. 490,890. Shank Sizes: $1\frac{1}{8}$ "x6", $1\frac{1}{4}$ "x6" (Hex.). Length: 16" u. c.



Keen Kut

Shank Sizes: $1\frac{1}{8}$ "x6", $1\frac{1}{4}$ "x6" (Hex.). Length: 14" and 18" u. c.



Frost or digging chisel

Shank Sizes: $\frac{7}{8}$ "x3 $\frac{1}{4}$ ", 1"x4 $\frac{1}{4}$ ", $1\frac{1}{8}$ "x6", $1\frac{1}{4}$ "x6" (Hex.). Lengths: $16\frac{1}{2}$ " and $17\frac{1}{4}$ " u. c. Blade: 3"x10" and 3"x12".



Frost wedge

Shank Sizes: $\frac{7}{8}$ " x3 $\frac{1}{4}$ ", 1"x4 $\frac{1}{4}$ ", 1 $\frac{1}{8}$ "x6", 1 $\frac{1}{4}$ "x6" (Hex.). Length: 17 $\frac{1}{2}$ " u. c. Wedge Sizes: 1 $\frac{7}{8}$ "x12" and 2"x12".



Shank Sizes: 1''x41/4'', 11/8''x6'', 11/4''x6'' (Hex.). Length: 11'' u. c. Sheathing Sizes: 2'' and 3''.



Shank Sizes: $\frac{7}{8}$ "x3 $\frac{1}{4}$ ", 1"x4 $\frac{1}{4}$ ", 1 $\frac{1}{8}$ "x6", 1 $\frac{1}{4}$ "x6" (Hex.). Length: 11" u. c. Blade Size: 5"x6".

PLEASE SPECIFY SHANK SIZE, LENGTH U. C. AND NAME OF TOOL WHEN ORDERING

Brunner & Lay's PAVING-BREAKER ACCESSORY TOOLS



Shank Sizes: 1"x4¼", 1½"x6", 1¼"x6" (Hex.). Length: 9" u. c. Pad Size: 7" Rd.



Shank Sizes: 1"x4¼", 1½"x6", 1¼"x6" (Hex.). Length: 9" u. c. Pad Sizes: 6" and 8" sq.



Pneumatic plug and feathers sets

Shank Sizes: 1"x41/4", 11/8"x6", 11/4"x6" (Hex.). Hole Size: 11/2" or 2" Standard (specify if other).



Clay spade

Shank Sizes: 1"x41/4", 11/8"x6", 11/4"x6" (Hex.). Blade Sizes: 41/2", 51/2" and 8" widths.



Pipe driver

Shank Sizes: 1"x41/4", 11/8"x6", 11/4"x6" (Hex.). Length: 12" u. c. Pipe Size: Specify.



Concrete buster

Shank Sizes: $\frac{7}{8}$ "x3 $\frac{1}{4}$ ", 1"x4 $\frac{1}{4}$ ", 1 $\frac{1}{8}$ "x6", 1 $\frac{1}{4}$ "x6" (Hex.). Length: 14 $\frac{1}{2}$ " u. c.

Brunner & Lay's CLAY DIGGER ACCESSORY TOOLS

* Shank Sizes: 7_8 " Hex. x 31_4 ", 3_4 " Sq. x 23_4 ", 7_8 " Hex. x 23_4 ". 3_4 " Hex. Rd. x 23_4 ", 7_8 " Hex. Rd. x 31_4 ".



Clay spade

Shank Sizes: *. Length: 16". Blade Sizes: $4\frac{1}{2}$ " and $5\frac{1}{2}$ " widths.



Bushing tool

Shank Sizes: * (Also P. B. and Chip. Hammer Shanks). Lengths: 9'', 12'' v. c. and $8\frac{1}{2}''$, $10\frac{1}{4}''$ o. a.



Tie tamper

Shank Sizes: $\frac{7}{8}$ " x2 $\frac{5}{8}$ " (Standard) also *. Face Sizes: All standard sizes. Length: 24" o. a.



Moil points or narrow chisels

Shank Sizes: *. Lengths: 14", 18" and 24".

PLEASE SPECIFY SHANK SIZE, PERTINENT TOOL DATA AND NAME OF TOOL IN ORDERING



Brunner & Lay's STANDARD CHIPPING HAMMER TOOLS

ROUND AND OVAL COLLAR TOOLS

U.S.N. HEXAGON OR ROUND SHANK

STANDARD TOOLS

U.S.N. HEXAGON OR ROUND SHANK

CHISEL BLANKS



Oval Collar—Round Shank

Stock Size: 1/8" Rd. only. Lengths: 9", 12", 18" and 24" O. A. Collars: Oval or Round.



Hexagon Shank



Round Shank

Stock Size: $3_4^{\prime\prime\prime}$ or $7_8^{\prime\prime\prime}$ Oct. Lengths: $9^{\prime\prime\prime}$, $12^{\prime\prime\prime}$, $18^{\prime\prime\prime}$ and $24^{\prime\prime\prime}$ O. A.

MOIL POINTS



Stock Size: 7/8" Rd. only. Lengths: 9", 12", 18" and 24" O. A. Collars: Oval or Round



Stock Size: 3/4" or 7/8" Oct. Lengths: 9", 12", 18" and 24" O. A.

FLAT CHISELS



Stock Size: 7/8" Rd. only. Lengths: 9", 12", 18" and 24" O. A. Collars: Oval or Round.



Stock Size: 3/4" or 7/8" Oct. Lengths: 9", 12", 18" and 24" O. A.

STAR DRILLS



Length: 12" O. A. only. Bit Sizes: ½", 5%", 3¼", 7%", 1", 1½", 1¼", 1¾", 1½". Collars: Oval or Round.





Length: 12" O. A. only. Bit Sizes: $\frac{1}{2}$ ", $\frac{5}{8}$ ", $\frac{3}{4}$ ", $\frac{7}{8}$ ", $\frac{1}{4}$ ", $\frac{1}{8}$ ", $\frac{1}{4}$ ", $\frac{1}{4}$ ", $\frac{1}{4}$ ", $\frac{1}{4}$ ", $\frac{1}{4}$ ", $\frac{1}{4}$ ". Wrench: If wanted.

HOW TO ORDER

When ordering above tools please list required specifications as follows:

- 1. Shank: USN Hex. or USN Rd.
- 2. Length: As listed above.
- 3. Collar: Oval or Round.
- 4. Bit Size (Star Drills only) as above.
- 5. Tool Name.

When ordering above tools please list required specifications as follows:

- 1. Stock Sizes: ¾" or ¾".
- 2. Length: As above.
- 3. Shanks: USN Hex. or USN Rd.
- 4. Bit Size: (Star Drill only) as above.
- 5. Tool Name.

Brunner & Lay's

HOLLOW DRILL STEEL and BIT ACCESSORIES

CARBON DRILL STEEL



SHANK SIZE	STEEL SIZE	THREAD TYPES AVAILABLE
	7⁄8″ Hex.	A, E, F, S, H, Type 0, Type 1, 112, 113
7/8" x 31/4"	1" Rd.	A, F, H, Type 1, 112, 113
7/8" x 41/4"	7⁄8 [™] Hex.	A, E, F, S, H, Type 0, Type 1, 112, 113
.""	1" Hex.	A, F, H, Type 1, 112, 113
1" x 41/4"	1 1/8 " Rd.	A, F, H, D, Type 1, Type 2, 112, 113, 200
1 1/8 " Rd. Lug	1 1/8 " Rd.	A, F, H, D, Type 1, Type 2, 200 and all one use connections
1 1/4 " Rd. Lug	11/4" Rd.	H, D, Type 1, Type 2, Type 3, 112, 113, 121, 200, 400, HL-14

EXTENSION STEEL



STEEL SIZE	THREAD TYPES AVAILABLE				
CARBO-ROK					
%″ Hex.	1" Rope, 200				
1" Hex.	1" Rope, 1.25" Rope, 200, 400, HL-14				
1¼" Hex.	1.5 Rope, 600, HL-16				
1½" Hex.	1.75" Rope, 700, HL-17				
DRILLALLOY*					
11/2" Rd.	1.5" Rope				
CARBON		v			
13/4" Rd.	1.75" Rope, 700, HL-17				
2" Rd.	2" Rope, 1000				





H-L Series Thread

Rope Thread

*DRILLALLOY—A superior quality alloy steel metallurgically engineered to allow rethreading in the field without any subsequent heat treating or hardening necessary.



STRIKING BARS Specify tube size.

SHANK SIZE	THREAD TYPES AVAILABLE
7/8" x 41/4"	200, HL-12, 1" Rope
1" x 41/4"	200, HL-12, 1" Rope, 400, HL-14, 1.25" Rope
11/4" Rd. Lug	400, HL-14, 1.25" Rope, 600, HL-16, 1.5" Rope
11/2" Rd. Lug	400, HL-14, 1.25" Rope, 600, HL-16, 1.5" Rope
11/2" Rd. x 5"	600, HL-16, 1.5" Rope
11/2" Rd. Lug	700, HL-17, 1.75" Rope
13/4" Rd. Lug	700, HL-17, 1.75" Rope
2" Rd. Lug	2" Rope, J7.5
21/2" Rd. Lug	2" Rope, 1000



COUPLINGS

	D TYPES
AVA	ILABLE
Н	J7.5
D	HL-12
200	HL-14
400	HL-16
600	HL-17
700	1" Rope
1000	1.25" Rope
Type 1	1.5" Rope
Type 2	1.75" Rope
J5.23	2" Rope



STANDARD BIT ADAPTERS

THREAD COMBINATIONS
AVAILABLE

H to D
D to K
200 to H
400 to D
600 to D
600 to K
HL-14 to D
1.25" Rope to D
1.5" Rope to 600
HL-16 to 1.5" Rope



WHIRLI-BIT

Shank size	Drill depth	Bit size
3/4" x 31/4"—9" u. c.	4"	3/4"
3/4" x 3 1/4"—9" u. c.	6"	3/4"
7/8" x 3 1/4"—9" u. c.	4"	3/4"
$\frac{7}{8}$ " x 3 $\frac{1}{4}$ "—9" u. c.	6"	3/4"
7/8" x 3 1/4"—9" υ. c.	4"	7/8 "
7/8" × 31/4"—9" υ. c.	6"	7/0 "



CARBIDE PLUG DRILL

for Joy L-27 and I. R. J-10

Drill size	Length	Bit size
J-10	12" o. a.	3/4"
L-27	6" o. a.	3/4"

Brunner & Lay's TUNGSTEN CARBIDE ROK-BITS

FOUR-POINT ROK-BITS



STANDARD STYLE



CUTAWAY STYLE



"X" TYPE (for long hole drilling)



CROSS TYPE (for long hole drilling)



Thread Gauge	A	F	н	D	113	121	Type 1	Type 2	Type 3	200	400	600	700	J5.23	J7.5 J7.23	1000	1" Rope		1.5" Rope		2' Rope	HL 14	HL 16	HL 17
1 1/4"	X				X												71							
1 3/8"		X			X			İ											1					
1 1/2"		Х	X		Х			İ	İ	Х							X							
1 5/8"		Х	X		X			Ì	İ	Х							X							
1 3/4"			X	X			X			Х							X		Î					
1 7/8"			Х	X				İ		X	†X						Х	†X				†X		
2"			X	X				X	i	Х	†X						X	†X	1			†X		
2 1/8"			X	X				Ì		X	* X						Х	* X	i			* X		
2 1/4"			X	X		X		X		X	*X						X	*x	İ			* X		
2 3/8"				X	Ì	X		i	Х		* X							*X				* X		
2 1/2"				X		X		i	X		*X	†X						* X	†X			* X	†X	
2 5/8"				X		Х													1					
2 3/4"				X		X			Х			† X							†X				†X	
3″				X	İ	X			Х			†X	X	X					†X	†X			†X	† X
3 1/2"											İ	1 † X	X	X	*X				†X	†X	†X		†X	†X
4"										1	1	1 † X	X	X	*x	*X			†x	†X	†X		†X	†X
4 1/2"				Ì		Ī	İ				İ	1			*x	*x	İ				† X		İ	
5"	2000		1	i -	i	1	1					i	i	i -		*X	i	1			†x		i	İ

^{*}Available in "X" design only.

†Available in "X" or cross design.

H also designated as 116H, D as 119D.



INTRASET CARBIDE INSERTED STEEL

Shank size	Steel section	Type	Bit sizes available
7/8" x 31/4" 7/8" x 41/4" Stoper	7/8" Hex.	Chisel Four point	1" thru 13/4" 11/4" thru 13/4"
1" x 41/4" Stoper	1" Hex.	Chisel Four point	1 1/8" thru 2" 1 3/8" thru 2"
11/8" Lug	11/8" Rd.	Four point	13/8" thru 2"
11/4" Lug	11/4" Rd.	Four point	11/2" thru 21/4"

TAPER TYPE ROK-BIT



Bit dia.	Taper	Connection available
11/4"	12°	Use on 7/8 in. steel
1 3/8 "	12°	Use on 7/8 in. steel
1 1/2 "	12°	Use on 7/8 in. or 1 in. steel
1 5/8 "	12°	Use on 1 in. steel
1 3/4 "	12°	Use on 1 in. steel

Shims furnished with all Taper Bits

ROK-MASTER ROK-BIT



SPLINE ROK-MASTER ROK-BIT



Bit size	Thread	Use
6"	2x3 API thread	with "Quarrymaster" drill
43/4"	Spline	with "Down the Hole" drill
5"	Spline	with "Down the Hole" drill
6"	Spline	with "Down the Hole" drill
61/2"	Spline	with "Down the Hole" drill
7"	Spline	with "Down the Hole" drill
9"	Spline	with "Down the Hole" drill